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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,865	03/10/2004	Richard Harry Hammar	GP-303778	3731

7590 09/14/2005

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EXAMINER

TOLAN, EDWARD THOMAS

ART UNIT	PAPER NUMBER
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3725

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/797,865

Applicant(s)

HAMMAR, RICHARD HARRY

Examiner

Edward Tolan

Art Unit

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Carlson (3,584,487). Carlson discloses a forming tool having a forwardly disposed forming surface (96) and a rearward surface having a plurality of blind bores (column 8, lines 31 and 32). The rearward surface bears against a support plate (60). A plurality of heating elements (88) are embedded within the forming tool. A plurality of load bearing supports (148) are disposed in the blind bores. The supports are located against the plate. The supports are composed of a thermally resistant material having greater resistance to thermal conductivity than the forming tool (column 8, lines 34-40).

The supports are load bearing posts since they are disclosed as plugs which contain and back up the bolt heads (144).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson (3,584,487) in view of McMillen (3,461,709). Carlson discloses a forming tool having a layer of predetermined thickness which is a forwardly disposed forming surface (92,94,96). The forming tool has a plurality of support structures (walls) (98,100,102) extending rearwardly from the layer. The support structures define open cells which have insulation (78,114,116,124,126,146) between the support structures (walls) in order to reduce thermal losses emanating from the forming surface. A plurality of heating elements (88) are embedded within the forming tool.

The support structure (96) has a rearward surface having a plurality of blind bores (column 8, lines 31 and 32). The rearward surface bears against a support plate (60). A plurality of load bearing supports (148) are disposed in the blind bores. The supports are located against the plate. The supports are composed of a thermally resistant material having greater resistance to thermal conductivity than the forming tool (column 8, lines 34-40). The supports (148) create a gap and cover strip plates (138,140) confine the insulation (146).

The supports are load bearing posts since they are disclosed as plugs which contain and back up the bolt heads (144).

Carlson does not disclose that the heating elements are located within the layer. McMillen teaches heating elements (70) that are located in a forming layer (48). It would have been obvious to one skilled in the art at the time of invention to provide heating elements as taught by McMillen in the forming layer of Carlson in order to directly heat the forming layer.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication should be directed to Ed Tolan whose telephone number is 571-272-4525. FAX papers should be sent to 571-273-8300.

EDTOLAN
PRIMARY EXAMINER
